

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KAJ HENRICSON

Appeal No. 1995-4804
Application No. 07/861,387¹

ON BRIEF

Before KIMLIN, JOHN D. SMITH, and PAK, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 15. Claims 16 through 21 stand

¹ Application for patent filed March 31, 1992. According to appellants, the application is a continuation-in-part of Application No. 07/839,389, filed February 21, 1992.

Appeal No. 1995-4804
Application No. 07/861,387

withdrawn from consideration by the examiner as being drawn to a non-elected invention.

Claim 1, the broadest claim in the application, reads as follows:

1. A method of treating filtrates from bleach plants for bleaching cellulosic pulp, including utilizing at least one ozone bleaching stage, comprising the steps of:

(a) washing the pulp in a washer with a wash liquid prior to the ozone bleaching stage, the wash liquid including filtrate from another washing stage of a bleaching stage;

(b) oxidizing the organic material in the filtrate used as wash liquid in step (a) prior to its use in step (a) in order to make the organic material less attractive to ozone in the ozone bleaching stage; and

(c) ozone bleaching the washed pulp in said at least one ozone bleaching stage.

As evidence of obviousness, the examiner relies on the following prior art:

Phillips et al. (Phillips) 1983	4,372,812	Feb. 08,
Stawicki 1985	4,543,155	Sep. 24,
Elton 1989	4,806,203	Feb. 21,
Azarniouch et al. (Azarniouch) 1991	5,061,343	Oct. 29,
		(Filed May 30,
1990) Griggs et al. (Griggs) 1993	5,211,811	May 18,

(Filed May 02,
1990)

The appealed claims stand rejected as follows²:

(1) Claims 1, 2, 11 through 13 and 15 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Griggs and Stawicki³;

(2) Claim 14 stands rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Griggs, Stawicki and Phillips⁴;

² The examiner states that "[claim 17 is rejected under 35 U.S.C. § 103 as being unpatentable over [Griggs] as applied to claim 16 above, and further in view of [Azarniouch]." See Answer, page 4. However, both claims 16 and 17 were withdrawn from consideration by the examiner himself during prosecution of the present application. See the final Office action dated February 2, 1994, Paper No. 11. Note also that no appeal is directed to the rejection of claim 17. See the Notice of Appeal dated May 9, 1994, Paper No. 12. Accordingly, we will not consider the merits of this rejection and will dismiss it.

³ The examiner inadvertently states that "[c]laims 1, 2, 11-13 and 15 are rejected under 35 U.S.C. § 103 as being unpatentable over [Griggs] as applied to claim 18 above, and further in view of [Stawicki]." See Answer, page 3. It is clear from the Answer that the rejection of claims 1, 2, 11-13 and 15 is based on the combined disclosures of Griggs and Stawicki and that no rejection of claim 18 is set forth in the Answer. See Answer, pages 3 and 4.

⁴ The examiner inadvertently states that "[c]laim 14 is rejected under 35 U.S.C. § 103 as being unpatentable over

(3) Claims 3, 4 and 10 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Griggs, Stawicki and Azarniouch; and

(4) Claims 5 through 9 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Griggs, Stawicki and Elton.

We reverse each of the foregoing rejections.

As evidence of obviousness, the examiner primarily relies on the combined disclosures of Griggs and Stawicki. See Answer, pages 3-8. Griggs teaches a process for delignifying and bleaching a lignocellulosic pulp, without the use of elemental chlorine. See the Abstract. The process involves, *inter alia*, washing the pulp in a washing stage with a wash liquid recycled from another washing step and bleaching the resulting pulp with ozone in an ozone bleaching stage. See Figures 1 and 2, in conjunction with column 20, lines 14-21. The wash liquid may be treated by reverse osmosis to provide

[Griggs and Stawicki] as applied to claim 19 above, and further in view of [Phillips]." See Answer, page 3. It is clear from the Answer that the rejection of claim 14 is based on the combined disclosures of Griggs, Stawicki and Phillips and that no rejection of claim 19 is set forth in the Answer. See Answer, pages 3-6.

an even cleaner filtrate to avoid the build-up of chloride. See column 22, lines 59-67. Griggs, however, does not teach oxidizing the organic material in the wash liquid prior to using it in the above mentioned washing stage to improve the efficiency of the ozone bleaching stage.

To remedy this deficiency in Griggs, the examiner refers to the disclosure of Stawicki. See Answer, page 3. Relying on column 7, lines 17-28, of the Stawicki disclosure, the examiner concludes (Answer, page 3) that:

It would have been obvious to one of ordinary skill in the art to oxygenate the organics in the filtrate of [Griggs] to make the organics less attractive to the bleaching chemical (ozone) in the bleaching stage of [Griggs] in the manner taught by [Stawicki] to make more effective use of the bleaching agent (ozone).

The dispositive question is, therefore, whether it would have been obvious to one of ordinary skill in the art to treat the wash water with oxygen prior to its use in a washing stage which comes before an ozone bleaching stage. We answer this question in the negative.

We find that Stawicki teaches introducing oxygen into the dilution zone of an extraction stage or into wash recycle filtrate which is supplied to the dilution zone of an

Appeal No. 1995-4804
Application No. 07/861,387

extraction stage. See column 4, lines 3-32 and column 7, lines 17-28. According to column 7, lines 17-21, of Stawicki:

It is believed that oxygen introduced into the dilution zone is effective to permit chemicals downstream of the extraction stage to which oxygen is supplied to react more fully with the pulp rather than with compounds dissolved in or carried by the filtrate.

Nowhere does Stawicki indicate that oxygen will function similarly as the reverse osmosis described in Griggs. Nor does Stawicki indicate that oxidizing the organic in the wash water will make the ozone bleaching described in Griggs more effective. Under this circumstance, we cannot agree with the examiner that Stawicki would have suggested adding oxygen to the washing liquid described in Griggs prior to its use in the washing step which is immediately before an ozone bleaching stage. Note that the extraction stage described in Griggs comes after an ozone bleaching stage. The remaining references, namely Azarniouch, Phillips and Elton, relied upon by the examiner to show the features recited in dependent claims 3 through 10 and 14 do not remedy the deficiencies in Griggs and Stawicki.

Appeal No. 1995-4804
Application No. 07/861,387

In view of the foregoing, we reverse the examiner's
decision rejecting claims 1 through 15 under 35 U.S.C. § 103.

No period for taking any subsequent action in connection
with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JOHN D. SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
CHUNG K. PAK)	
Administrative Patent Judge)	

CKP:lp

Appeal No. 1995-4804
Application No. 07/861,387

NIXON & VANDERHYE PC
8TH FLOOR
1100 NORTH GLEBE ROAD
ARLINGTON, VA 22201-4714

Leticia

Appeal No. 95-4804

Application No. 07/861,387

APJ PAK

APJ JOHN D. SMITH

APJ KIMLIN

DECISION: REVERSED

Send Reference(s): Yes No
or Translation (s)

Panel Change: Yes No

Index Sheet-2901 Rejection(s): _____

Prepared: October 10, 2000

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT